

Massachusetts Expanded Learning Time (ELT) Initiative

Case Studies 2010-2011

June 1, 2012







Prepared for:

Massachusetts Department
of Elementary and
Secondary Education

Prepared by:

Abt Associates Inc.

Meghan Caven

Amy Checkoway

Lianne Fisman

Beth Gamse

Alyssa Rulf Fountain

With assistance from:
Rodolfo de la Cruz
Eric Friedman
Kristina Kliorys
Rachel McCormick
Missy Robinson

Table of Contents

Background.		1
Methodology		2
Data Co	ollection Methods and Analysis	2
Case Study of	A.C. Whelan Elementary School	4
•	Context	
School	Schedule	4
•	eme: Multiple Pedagogical Approaches Used within Class Periods	
•	eme: Students Provided with Structured Opportunities to Practice Academic Skills	
•	eme: Positive Student-Teacher Relationships Observed During Enrichment Activities eme: Differentiated Instruction Observed During Academic Support Periods	
_	Silvia Elementary School	
	Context	
	Schedule	10
•	eme: Students at Silvia Engage in a Range of Instructional Activities over the Course Day	11
Key The	eme: Multiple Opportunities for Skills Practice Observed across Core Academic	
	eme: Student-Centered Enrichment Observed With Connections to Academic Content	
•	eme: Academic Support Time Used to Fill Gaps in Understanding	
Case Study: (Clarence R. Edwards Middle School	16
	Context	
School	Schedule	16
Key Th	eme: Across Core Academic Classes, Teachers Used Common Instructional Practices eme: Student Engagement Appeared Related to Lesson Structure and Student-	
	Relationship versus Time of Dayeme: Student Engagement in Enrichment Programming Varied	
•	eme: Academic Support Classes Featured Independent Student Work	
·	•	
	onclusions	
	between Teachers and Students Seemed to Affect Student Engagement	
	Preparation Was an Important Focus Across Schools	
	Data to Guide Instruction Was Observed Across Schools	
	nent Perceived Across Schools as Fun and Opportunity to Strengthen School	
Connec	tions	26
Conclusions a	and Areas for Future Study	27
Appendix A.	Massachusetts Expanded Learning Time (ELT) Implementation Index, 2009-10	29
Appendix B.	Case Study Data Codebook	37
Appendix C.	ELT Student Scan for Engagement (ESSE)	41
Appendix D.	Administrator and Teacher Interview Protocol	45
Appendix E.	Student Focus Group Protocol	50

Background

The Massachusetts Expanded Learning Time (ELT) initiative was launched in 2005, and it provides grants to selected schools¹ across multiple districts to increase instructional time by at least 300 hours per academic year. Participating schools receive an additional \$1,300 per student to lengthen the day and/or year. Schools are expected to use the additional time to provide more instructional opportunities in core academic subjects, integrate additional enrichment opportunities into student learning, and to increase opportunities for educators to plan for instruction and participate in professional development. ELT schools are also encouraged to provide students with dedicated academic support time as part of the school schedule. Such targeted support is intended to fill gaps in students' knowledge and skill sets by providing them with individualized academic attention.

The Massachusetts Department of Elementary and Secondary Education (ESE), with support through a research grant from the Institute of Education Sciences (IES) of the U.S. Department of Education, commissioned a multi-year quasi-experimental study of its Expanded Learning Time (ELT) initiative. The purpose of the study was to examine implementation of the ELT initiative, compare academic and nonacademic outcomes, and assess the relationship between implementation of core elements of the ELT initiative and outcomes.

Among other findings, the study found that implementation of the core ELT components varied considerably across schools.² It is important to note that the study was designed to understand both implementation and impacts for the initiative as a whole, rather than for individual schools. To learn more about possible explanations for variation in implementation of ELT, the study team conducted case studies of three purposively selected ELT schools. The case studies were designed specifically to examine two components of ELT implementation: enrichment and dedicated academic support, and the student experience of ELT.³

The schools considered for the case study were characterized as having high-level ELT implementation,⁴ and were also selected with assistance from ESE and other stakeholders. The three ELT schools included are the A.C. Whelan Elementary School in Revere, Frank M. Silvia (formerly known as North End) Elementary School in Fall River, and Clarence R. Edwards Middle School in Charlestown.

This report has two major sections. The first section includes descriptions of key themes within each of the three schools, and it also presents illustrative examples of student and teacher activities from classroom observations in text boxes alongside the descriptions. The second section presents a discussion of cross-school findings and conclusions.

As of the 2011-2012 school year, 19 schools across 9 districts receive ELT grants.

The final study findings are available online at: http://abtassociates.com/Reports/2012/-ELT-Year-5-Final-Report.aspx

Other core components of the Massachusetts ELT initiative that were not the focus of these case studies include additional time for core academic subjects, common planning time and professional development for educators and implementation of a school-wide academic focus.

An implementation index developed for the broader ELT evaluation quantified the level of implementation for each school on five criteria considered to be critical by ESE and other key stakeholders. The implementation index used to select schools for these case studies (based on data from the 2009-10 school year) is included in Appendix A; this index was revised in 2010-2011.

Methodology

Abt Associates collected data for these case studies during two-person site visits to the three schools during the 2010-11 school year. Study team members followed the same homeroom class for the duration of each site visit. One researcher took ethnographic field notes about instructional approaches, student engagement, and classroom dynamics. The other researcher observed the types of activities in which students were engaged throughout each class block; the observations used a structured observation protocol developed specifically for this set of case study schools.

In total, six "researcher days" were spent at each school, and a total of 65 classroom periods were observed across the three schools. At one school, three distinct researcher pairs followed three discrete classes for an entire day. At the other two schools, two pairs each conducted full-day site visits on different days, and a third pair joined these site visits for half a day each. A summary of the numbers and types of classes observed at each school is presented in Exhibit 1.

	Edwards Whelan			Silvia	
Subject		Day 1	Day 2	Day 1	Day 2
Science	3	2	0	1	1
Social Studies	3	2	1	0	0
Math	3	1	1	2	2
English Language Arts (ELA)	3	1	1	4	4 ¹
Specialty Classes	3	3	1	2	2
Academic Support	3	2	0	0	0
Enrichment	3	0	2	2	0
Other Periods	3 ²	1 ³	1	1	1 4
Total (65)	24		19		22

Exhibit 1 Number of Classroom Observations Conducted (Class Periods)

- 1. Three different classes at Silvia were considered to be ELA: Literacy, Writing, and Elements of Reading.
- 2. These observations represent study hall.
- 3. This observation represents opening exercises.
- 4. This observation represents calendar math.

For the purposes of this report, specialty classes are defined as non-core academic courses attended by all students in a particular grade (e.g., physical education, art, library). Enrichment classes are defined as classes with either academic or non-academic content attended by some students. For example, while all students might participate in enrichment activities, they might not attend the same activity. Dedicated academic support periods represent those extra blocks of time that targeted specific academic skills according to student needs.

Data Collection Methods and Analysis

Four data collection activities were used for these case studies and are described below. All the codes used to analyze the data are found in the case study codebook (see Appendix B).

Ethnographic Field Notes

During the site visit, one study team member documented observed classroom activities using an ethnographic approach. The narrative field notes described sequences of events, interactions between students as well as between students and teachers, teaching strategies, classroom activities, and other aspects of the student experience. Field notes were then aggregated and analyzed within and across schools using NVivo, a qualitative coding and analysis software package that allows analysts to organize data by specific theme or construct. For these case studies, the themes of interest included the teaching strategies used in ELT classrooms; learning objectives of lessons; student-teacher interactions; and school climate.

ELT Scan for Student Engagement (ESSE)

The other researcher in each pair periodically scanned the classroom to record how many students were engaged in various activities and groupings. The ELT Scan for Student Engagement (ESSE) was developed by Abt Associates specifically to measure the following: the number of students at any one time who were on-task, off-task, or being disciplined; the type of activity in which each on-task student was engaged: hands-on, text-based, or discussion; and the type of instructional grouping; whole group, small group or individual (see Appendix C). Scans were conducted every eight minutes, and results help to describe patterns in student engagement and classroom activities.

ESSE data were first aggregated to the "sweep" level. Next, the percentage of students engaged in each activity category during a sweep was calculated by dividing the number of such students by the number of students observed as on-task. Repeating this process for each sweep and combining the data yielded the total number of students observed, number and percent of students on task, and percent of on-task students engaged in each category for each sweep. Higher-level aggregations, depending on specific analytic questions, were then created by averaging across sweeps.

Interviews with Teachers and Administrators

In addition to observing classroom activities, researchers interviewed school administrators and teachers of academic support and enrichment classes. Interviews focused on various aspects of academic support and enrichment programing, including student placement, teacher assignment, and professional development. The teacher and administrator Interview protocols are included in Appendix D. Notes from interviews with teachers and administrators were coded and analyzed using NVivo.

Student Focus Groups

At each school, researchers conducted a focus group with five to eight students. Students were selected by teachers and administrators based on the request for a group representing a diverse range of student ability and personalities. At each school, at least some of the students came from the class being observed by the research pair, and all students came from the grade-level being observed; the same researchers who observed the class facilitated the focus group. Focus group questions focused on students' school experiences in academic and non-academic settings, relationships with adults at school, and involvement in activities outside of school. The student focus group protocol is included in Appendix E. Notes from student focus groups were coded and analyzed using NVivo.

Case Study of A.C. Whelan Elementary School

School Context

The A.C. Whelan Elementary School in Revere, a city located about five miles northeast of Boston. Whelan first received an ELT grant in the fall of 2008. As of 2010-11, the principal had led the school for five years.

The school occupies a modern, sandy-colored brick building that sits on a large property. The building has two distinct wings. Whelan occupies one wing, and a separate middle school occupies the other one. The two schools share the facility's spacious gymnasium and library. The hallways at Whelan are bright, wide, and clean, lit at their ends by big windows, and decorated throughout with student work, posters related to literacy (the school's academic focus for the school year), and large motivational banners. The classrooms that the research team observed are also large and bright, with windows along one wall.

In 2010-11, Whelan served 757 students in kindergarten through grade five. The student body as a whole was 60 percent white and approximately 30 percent Hispanic. Asian and African American students each made up about five percent of the school's population. Thirty-five percent of students had a first language other than English, and roughly 55 percent of students were eligible for free or reduced-price lunch; both of these rates were lower than the district average, and higher than the state average. This case study focuses on 5th grade students.

School Schedule

During 2010-11, the school day at Whelan began at 7:55 am and adjourned at 3:55 pm. A sample 5th grade student schedule is shown in Exhibit 2. Of note, rather than distributing time equally between classes, certain subjects at Whelan were taught for longer blocks. Specifically, math and reading were taught during two 80-minute blocks in the mornings, and science and social studies were taught during two forty-five minute blocks in the afternoons. Whelan's four fifth grade teachers worked in pairs; within each pair, one teacher taught ELA and social studies, and the other taught math and science to their two homeroom classes. A variety of academic support periods were offered four out of five days each week. Enrichment classes were taught once per week.

Abt Associates Inc.

Sample Whelan Daily Schedule, 5th grade, 2010-11 Exhibit 2.

Time	Monday	Tuesday	Wednesday	Thursday	Friday
7:55-8:25	Opening Exercises	Opening Exercises	Opening Exercises	Opening Exercises	Opening Exercises
8:25-9:05	Physical Education	Physical Education	Physical Education	Physical Education	Physical Education
9:10-10:30	Reading	Math	Reading	Math	Reading
10:30-10:45	Snack	Snack	Snack	Snack	Snack
10:50-12:10	Math	Reading	Math	Reading	Math
12:10-12:55	Library	Music	Technology	Spanish	Art
12:55-1:25	Lunch	Lunch	Lunch	Lunch	Lunch
1:30-2:15	Science	Social Studies	Science	Social Studies	Science
2:15-3:00	Social Studies	Science	Social Studies	Science	Social Studies
3:05-3:55	MCAS Prep	Creative Extension	SQUIRT	Enrichment	Content Support

Key Theme: Multiple Pedagogical Approaches Used within Class Periods

In each core academic subject class (9) and each academic support class (2) observed, researchers noted that teachers used at least three different instructional strategies to develop their students' understanding of a topic. During one math class, for example, students engaged in hands-on activities, watched an instructional animated film on a Smart Board, manipulated the Smart Board, worked on individual

whiteboards before showing their work to the class, participated in a short, whole-class, didactic lesson and demonstration, and worked independently in practice workbooks. A similar breadth of learning opportunities was provided in other observed classes.

In addition to using a variety of teaching strategies, Whelan teachers structured lessons to engage students in whole-class, individual, and small-group work. During the observed core classes, students were engaged in at least two different instructional groupings during a period. Exhibit 3 illustrates the broad distribution of teaching strategies and instructional groupings demonstrated at Whelan across class types.

At one point in the lesson, there is an image with panes of glass that change color projected on the smart board. The teacher asks one student what proportion of the glass are a particular color. The student looks confused and does not respond. The teacher then suggests that she go to the front and point to the panes as she speaks about them. The student does this and manages to articulate the fraction correctly.

Exhibit 3. Distribution of Instructional Modes across Class Types, Whelan

	Class Type					
	Core (n=63)	Enrichment (n=11)	Special (n=21)	Support (n=13)	All (n=108)	
Panel 1: Average proportion	of time stude	nts engaged in	instructional	activity		
Using Book or Worksheet	47%	3%	15%	36%	35%	
Listening	39%	20%	58%	37%	41%	
Talking	18%	38%	26%	34%	23%	
Hands-On Activities	16%	34%	39%	39%	25%	
Panel 2: Average proportion	of time stude	nts spent in in	structional gro	ouping		
Whole Class	49%	22%	61%	52%	49%	
Small Group	16%	36%	27%	33%	22%	
One-on-One	<1%	3%	0%	0%	1%	
Independent	29%	36%	3%	15%	23%	

Notes:

- 1. Percentages do not total to 100% because students could participate in multiple types of activities or instructional
- 2. Sample sizes represent the total number of sweeps of classroom activities conducted by observers.
- 3. Core classes included: reading, math, science, and social studies. Enrichment classes included "Fun Club" and sewing. Specials included music, physical education, and Spanish. Academic support included a general academic support period and a social studies support period.

Whelan's core academic teachers consistently integrated technology into their lessons. In one ELA class, for example, students listened to a recorded short story before completing an online assessment of their understanding. The online assessment was then used to calculate students' progress and identify areas of weakness to the teacher through an online portal. In another class, a math teacher used an interactive video to help a student understand fractions. The use of technology seemed to catalyze student engagement and participation in various lessons. In other instances, the use of technology in the classroom appeared to motivate student participation. For example, students in one class vied for the opportunity to move slides forward in an interactive PowerPoint presentation. In another class, students volunteered to come to the projector and show their work to the class. In a third class, students lined up excitedly to go to the computer lab and work on a descriptor program. "They love it [Study Island]," their teacher commented.

Key Theme: Students Provided with Structured Opportunities to Practice Academic Skills

Skills practice was the most predominant learning objective coded across field notes from all core academic classes. Field notes from all nine core classes observed at Whelan included coded references to skills practice. Skills practice took a variety of forms, and ranged from students completing practice problems individually in a math textbook, to a whole-class activity on locating prepositional phrases on a page of song lyrics.

Many of the classes in which students practiced academic skills emphasized preparation for the MCAS (Massachusetts Comprehensive Assessment System) test.⁵ The research team observed fifth graders who practiced test-taking skills in all of the core classes. In four of the nine core content area classes that researchers observed, for example, students were engaged in multiple choice activities that mimicked the structure or content of the MCAS test. For example, in a math class, the teacher used a worksheet as an opportunity to coach students on test-taking strategies. The class worked together on a multiple choice question, narrowing down the possible responses until they identified the correct answer. While working on a quiz on electricity and circuits during a science class, the teacher noted, "these are all questions vou'll see on MCAS."

In addition, the principal of Whelan confirmed that the development of test taking skills is emphasized during dedicated academic support classes. He described the content of the weekly MCAS prep classes as follows: "Much of it is teaching the strategies on taking the test...it is practice."

Key Theme: Positive Student-Teacher Relationships Observed During Enrichment Activities

Enrichment classes at Whelan were offered once per week during the last block of the day during 2010-11. These classes were taught by homeroom teachers and some teachers of specials subjects. Teachers chose and designed the enrichment class(es) they offered, and students chose their classes. The enrichment classes observed at Whelan included a sewing class and 'Fun Club,' a class taught in Whelan's gym that focused on physical activity. During the focus group, students mentioned other enrichment classes, including painting, Junior Coaching, knitting, and board games.

The tone of these classes appeared more relaxed than in the core or academic support classes observed by the research team; student-teacher relationships were consistently amicable and 'fun' emerged as a learning objective. Students seemed particularly engaged during the two enrichment periods observed by the research team.

Field notes from observed enrichment classes described warm and collaborative student-teacher relationships. In her sewing class, for example, the teacher took time to ask each student what color fabric they would like to make their pillow out of. She planned to shop for material that upcoming weekend, and despite having initially told students that "majority ruled," she volunteered to get some green fabric for the two students who wanted neither purple nor blue. This teacher noted that in enrichment classes, "You can be a little bit more relaxed. They tell me things in sewing, and don't look at me as the teacher any more – they tell me about what they did over the weekend." The principal described enrichment as an "opportunity for a break for some fun activities," and reinforced that "teachers think it is important for the kids" and that teaching enrichment "is a passion for some of the teachers, an opportunity to share another side or interest of theirs with the kids." All five students in the focus group remarked that enrichment was engaging in one way or another; one student noted that it was 'fun and relaxing,' another that it 'helped kids be interested in school'.

The intensity of MCAS preparation at Whelan may reflect the timing of the site visits to this school. The site visit team visited the school in mid-February 2010, approximately one month prior to MCAS test administration.

Exhibit 4 details students' behaviors across class types. More students were on task during enrichment classes (87 percent) than during any other class type. Field notes align with the ESSE scans; observers noted that students were engaged in enrichment activities and that there were very few instances of discipline.

Exhibit 4.	Summary of	Student	Behavior	across	Class	Types.	, Whelan
------------	------------	---------	-----------------	--------	--------------	--------	----------

	Class Type					
	Core (n=63)	Enrichment (n=11)	Special (n=21)	Support (n=13)	All (n=108)	
On-Task	83%	87%	76%	80%	82%	
Off-Task	7%	3%	15%	9%	8%	
Being Disciplined	1%	0%	<1%	7%	2%	

Notes:

- 1. Percentages do not total to 100% because students could also be coded as "in transition," which was considered a separate category of behavioral activity.
- 2. Sample sizes represent the total number of sweeps of classroom activities conducted by observers.
- 3. Core classes included: reading, math, science, and social studies. Enrichment classes included "Fun Club" and sewing. Specials included music, physical education, and Spanish. Academic support activities included Morning Exercises and specific academic support periods.

Key Theme: Differentiated Instruction Observed During Academic Support Periods

Academic support at Whelan was offered four afternoons each week by homeroom teachers to their own homerooms. According to the school's principal, each of these four classes had a different focus, "One of the days will be an MCAS module, one of the days will be a creative extension of a lesson taught during a core academic class, two of the days will be studying or working with their teacher (also known as Content Support)..." Whereas many ELT schools identified specific content area(s) for targeted support,

One student and her partner finished their worksheet and are putting other objects between the wires in their circuit. The student calls me (observer) over to show me that they have figured out that the metal part of her lead pencil is a conductor. Two other students are also finishing the worksheet. They take the battery out of their circuit and flip it over so that the minus is where the positive side is supposed to be. They discover that the circuit no longer conducts.

remediation, or skills practice, and delivered all academic support in that subject, Whelan teachers created their own schedule for the academic support periods. Specifically, they rotated ELA, Math, Science, and Social Studies. Teachers picked the current focus by either identifying a concept that student were struggling with or by planning an experiment or extension activity for the curriculum.

The Abt team visited when the scheduled activity was Content Support. The school cancelled the academic classes scheduled for the early part of the afternoon because a local radio station sponsored a surprise concert by a band. Because of this unusual shift in the school schedule and obvious excitement of the students. it is unclear whether the research team's observations reflected a 'normal' support period. Below is a brief description of the two classes observed, although it is important to underscore that the structure and objectives of these classes may reflect the anomalous nature of the day.

In one class, students did an activity building circuits in small groups. In this class, the students were then supposed to hypothesize whether various objects would act as insulators or conductors, test their theory on their circuit, and record the outcome. The teacher did not clearly articulate the instructions and so while students remained engaged throughout the activity, most did not follow the protocol.

In the other class, students and their teacher read a play entitled 'So You Want to be a Colonist.' The play was a modern gameshow based on 'Who Wants to be a Millionaire' but was about the Jamestown settlement in the early 1600s. The teacher played the role of host, and students had minor speaking parts—two on stage throughout played the contestants, and rotating groups of three students acted out mini scenes.

"A lot of teachers wanted more time to help the children master some skill or lesson, time for a lab period to use music, arts, or more hands-on approach to learning the classroom lesson, or for struggling kids to complete the classwork... At first teachers just wanted to cover more material, but now it is understood that teachers should support the classwork with differentiated approaches in the academic support period." -Whelan administrator

The ESSE data (see Exhibit 5) and field notes both showed that students were generally engaged and ontask during academic support classes

Exhibit 5. Summary of Student Behavior During Academic Support Periods, Whelan

Average proportion of time students were:	Circuits (n=8)	"Who Wants to be a Colonist" (n=5)
On-Task	72%	92%
Off-Task	10%	8%
Being Disciplined	11%	0%

Notes:

- 1. Percentages do not total to 100% because students could also be coded as "in transition," which was a separate category of behavioral activity.
- 2. Sample sizes represent the total number of sweeps of classroom activities conducted by observers.

Case Study: Silvia Elementary School

School Context

The Frank M. Silvia School, formerly known as North End Elementary, is located in Fall River, an urban community approximately 45 miles south of Boston. It first received an ELT grant in the fall of 2007. As of 2010-11, the principal had led the school for seven years.

The building itself is new and in good repair. There is a brand new-looking play structure behind the school, and a blacktop with basketball hoops and four-square courts. The hallways at Silvia are clean and wide, and lined with lockers. The classrooms that observers visited are large with many windows. Each room has posters covering much of the open wall space and four Apple computers.

When the research team visited Silvia, student work and information about academic performance was displayed on the many bulletin boards in the hallways. One exhibit consisted of a target of concentric red, yellow and green circles. Arrows made of construction paper, each with a student's identification number on it were stuck to the target, indicating progress towards achieving proficiency on MCAS.

In 2010-11, Silvia served 682 students from pre-Kindergarten through grade five. The student body was 72 percent white and roughly 15 percent Hispanic. Asian and African American students made up about two percent and six percent of the school's population, respectively. Students of color made up a smaller proportion of Silvia's population than did students of color in the district as a whole. At Silvia, 14 percent of students spoke a first language other than English, and roughly 67 percent of students were eligible for free or reduced-price lunch. Both of these rates were lower than the district average, although the proportion of students eligible to receive free and reduced-price lunch was higher at Silvia than the state average. This case study focuses on 5th grade students at Silvia.

School Schedule

In 2010-11, school days at Silvia began at 7:45 am and adjourned at 3:15 pm. Mondays were early release days at Silvia; the students were dismissed at 2:15 and the teachers used the rest of the afternoon for common planning. Exhibit 6 shows a sample weekly schedule for a 5th grade student at Silvia. Students followed the same schedule every day except for the last block, which rotated. Of note, Silvia teachers separated the ELA curriculum into components and taught all three courses every day, which amounted to more than two hours of ELA instruction daily. Silvia's fifth grade teachers were more departmentalized. One taught math, one taught writing and one taught science and social studies, each to the entire grade. Every teacher instructed his or her own homeroom class in elements of reading and literacy, as well as calendar math, at the start of each day.

Abt Associates Inc. ELT Case Studies 2010-2011 pg. 10

Exhibit 6. Sample Silvia Daily Schedule, 5th grade, 2010-11

Time	Monday	Tuesday- Friday	Wednesday	Thursday	Friday
7:45-8:15	Calendar Math	Calendar Math	Calendar Math	Calendar Math	Calendar Math
8:15-9:15	Writing	Writing	Writing	Writing	Writing
9:15-10:15	Science/Social	Science/Social	Science/Social	Science/Social	Science/Social
9.15-10.15	Studies	Studies	Studies	Studies	Studies
10:15-10:30	Recess	Recess	Recess	Recess	Recess
10:30-10:54	Elements of	Elements of	Elements of	Elements of	Elements of
10:30-10:54	Reading	Reading	Reading	Reading	Reading
10:54-11:42	Specials	Specials	Specials	Specials	Specials
11:42-12:39	Math	Math	Math	Math	Math
12:39-1:14	Lunch	Lunch	Lunch	Lunch	Lunch
1:15-2:15	Literacy	Literacy	Literacy	Literacy	Literacy
2:15-3:15	Early release	Enrichment	Academic	Academic	Charus
2.15-3:15	day	Ennonment	Support	support	Chorus

Key Theme: Students at Silvia Engage in a Range of Instructional Activities over the Course of the Day

Over the course of the school day at Silvia, researchers observed students engaged in a wide range of instructional activities and groupings. Students participated in whole-class discussion, independent seat work, collaborative group work, and one-on-one conferences with the teacher. Students worked on ongoing-independent projects, creative group projects, and skill building exercises both individually and as a whole class. In every core class, the teachers used at least two different instructional activities and had students in at least two different instructional groupings. Exhibit 7 shows the distribution of time spent in various learning activities and groupings.

Exhibit 7. Instructional Activities and Groupings across Class Types, Silvia

	Class Type				
	Core	Enrichment	Special	Support	All
	(n=103)	(n=13)	(n=23)	(n=4)	(n=143)
Panel 1: Average proportion	on of time stud	lents engaged	in instructiona	al activities:	
Using Book or Worksheet	42%	14%	17%	0%	34%
Listening	32%	39%	20%	33%	31%
Talking	24%	17%	28%	58%	25%
Hands-On Activities	24%	42%	41%	28%	28%
Panel 2: Average proportion	on of time stud	lents spent in i	nstructional g	roupings:	
Whole Group	34%	43%	38%	75%	37%
Small Group	22%	33%	37%	23%	26%
One-on-one	2%	0%	<1%	2%	2%
Independent	16%	16%	7%	0%	26%

Notes:

- 1. Percentages do not total to 100% because students could also be coded as "in transition," which was a separate category of behavioral activity.
- 2. Sample sizes represent the total number of sweeps of classroom activities conducted by observers.
- 3. Core classes included: calendar, reading/literacy, writing, math, science, and social studies. Enrichment classes included "Blip-Blip Submarines" and cooking. Specials included music, physical education, and art. Academic support was one class of math support.

The following description of a math class illustrates the use of multiple instructional groupings and activities within one class period at Silvia.

The math class began with the teacher reviewing the material covered in the previous class (a didactic instructional approach): After the teacher completed a sample problem on the overhead projector, the class shifted to independent seat work; the students worked on a handout. As the students worked on the assignment, the teacher circulated, providing one-on-

The students move into their groups, which range from 2 to 4 kids... Each group of students is already working on a poster that relates to fractions. All of the problems involve a specific number of people needing to equally divide up a given number of would be held later that week. Students.

one instruction to students.

When students completed the hand announced they were to work in such complete their posters for the 'gall' would be held later that week. Students.

requires the student to divide three sandwiches equally between four people and another asks to divide two sandwiches between five.

sandwiches. For example, one problem

Michael explains that he chose the problem with three sandwiches to be divided equally amongst four people. His paper has a grid with 12 squares and each square has 1/4 written in it. He explains to Jermaine that he distributed the 1/4 evenly (basically, each column is a person, but he does not articulate it this way). Jermaine says to Michael, "so, you want this to look like 1/4s....you know what you can do? Color code them." Michael appears to be listening intently as Jermaine explains, "Okay, so person 4 is yellow-color everyone that is 3 in blue..." Michael begins counting out every fourth square and then coloring it yellow. Then he completes this exercise on a small paper and begins transferring it to the poster.

When students completed the handout, the teacher announced they were to work in small groups and complete their posters for the 'gallery walk' that would be held later that week. Students worked on this small group activity for the majority of the class period. Researchers noted that, as students worked, they talked with one another about the math problems.

The observers recorded one-on-one instruction less frequently than other teaching strategies, although teachers intentionally integrated it into their lessons. In a writing class, students worked independently on compositions that related to their social studies curriculum, while the teacher invited individuals or small groups of students to her desk for short conferences.

Within this class period, the teacher used four instructional groupings (whole class, small group, one on one and independent) as well as three instructional activity types (hands-on, worksheet and listening/didactic).

Key Theme: Multiple Opportunities for Skills Practice Observed across Core Academic Classes

Skills practice, also called 'independent practice' was a frequently-noted learning objective across all core academic classes observed at Silvia. A skills practice activity involved students repeating similar

exercises without additional instruction or new information. Some examples of skills practice observed by the research team included the practice of particular mathematical calculations, practice employing research protocols like citing a source, and practice answering multiple-choice questions related to short selections of text.

The field notes from each of the 16 observed core academic classes included at least one reference to skills practice. In all four math classes observed, student work centered on conversion between fractions, decimals, and percentages, which had been introduced prior to the site visit; the lessons focused on developing students' facility with such conversions. The Calendar Math periods reviewed math concepts that students had covered both earlier in the school year and in prior grades. In science, students practiced skills that were transferrable across disciplines, including research methods and mapping.

A teacher explains that the class will write the title of a different environment in each of the boxes on their sheet and then search though the resources they have for a fact about each environment. She ensures that they know that they are expected to reference "title of the book and page number" where their facts came from. She opens a book and models the exercise: "So I could write 'the desert gets only 10 cm of rain each year.' Earth's environments page 15."

The teacher reads the introduction to the text, two or three sentences that introduce the main character, and his battle against the 'legendary' Manta Diablo in his search for the black pearl. At the mention of Manta Diablo – a giant stingray, the class collectively ohhs and aahs.

"What do we get out of reading the intro?" the teacher probes.

"El Diablo means devil" – offers one student.

"We get the main problem, and a summary of the story" says a student.

The teacher paraphrases and affirms both of these answers, and then asks a vocabulary question: "what does legendary mean?" Another student raises his hand.

"It means, like when a story is passed down from generation to generation it becomes a legend." Notably, in all six ELA classes observed, some component of skills practice emphasized preparation for the MCAS. In one class, for example, students worked on a project that spanned literacy and social studies. The assignment required each student to select a battle from the Revolutionary War and then conduct independent research to write a report based upon a pre-set outline supplied by the teacher. The teacher noted that the exercise is "like what we did in MCAS practice" when she distributed the outline to students. In another class, the students worked on a reading comprehension exercise from an old MCAS test, reading an excerpt for a short story and receiving coaching from their teacher on both reading-comprehension and testtaking strategies. On the wall of the classroom was a poster that read "MCAS Practice protocol." The poster detailed five steps students were supposed to take related to MCAS practice, including reviewing teacher feedback; answering multiple choice questions using strategies; and making a

"T-chart" (a chart in which students organize arguments and evidence to answer open response questions).6

The T-chart was commonly used in the observed ELA classes at Silvia. According to the principal, students practiced applying it on the open response questions on the MCAS (which the district test results indicated was a weakness for Silvia).

Key Theme: Student-Centered Enrichment Observed With Connections to Academic Content

Enrichment at Silvia took place once per week, and classes were taught exclusively by classroom teachers. Fourth and fifth-grade students took enrichment together in multi-grade classes. Each enrichment class lasted ten weeks and culminated in a gallery walk where students traveled from class to class in order to see their peers' work and judge which enrichment class they might like to take next.

According to the principal, enrichment programming at Silvia was designed, at least in part, by the students. "There is an interest inventory for the students, so I send that out and we get them back and then we tally them up. So we get the ideas from the kids. Then we list all of them and we say to the teachers, you need to adjust your module to what they want." Observers also interviewed the teachers of enrichment classes, who agreed that student interest drove the design of enrichment programming. Additionally, one teacher remarked, "we keep the Academic Focus in mind as we design the modules."

Researchers observed two different enrichment classes at Silvia: 1) Seasonal Cooking and Crafts; and 2) Blip-Blip Submarines. A special education teacher led the former and a science teacher led the latter.

their academic work throughout the week.

water temperature. ESSE data indicated high levels of student engagement during these periods; observers classified an average of 82 percent of students as on-task during the two enrichment classes. Focus groups indicated that the students perceived enrichment as a fun reward for

In both observed classes, students had opportunities to make choices, engage in hands-on learning, and connect the activity to core academic content. One teacher noted that she hoped that enrichment classes helped students to understand the "interrelationship and connections between things they are learning."

"We have just a couple of weeks to finish our final projects" the teacher says "but I know that some of you have gotten stalled. You can finish the project you were working on building a model of a historical submarine or submersible - if you're committed to it. or I have an idea of something we can all do together if you're stuck. It's your choice."

Five students opted to continue working on their submarine projects and nine decided to work on the Cartesian diver. Both groups of students remained engaged in their chosen activities throughout the class period. By the end of the class period, all of the students who chose to work on making Cartesian divers had created divers that plunged, and many had experimented with additional variables like salinity and

Classroom observations took place approximately one month before students took the MCAS exam; the timing of observations may have played some role in the extent to which teachers emphasized MCAS strategies during academic classes.

The Blip-Blip Submarines lesson that researchers observed included a study of historical submersibles, the engineering of a Cartesian diver, and an experiment that involved changing single variables in each diver's environment. In the seasonal cooking and crafts class, students engaged in a creative writing activity related to their cooking, and shared their poems with the class.

The Silvia principal confirmed that enrichment at Silvia is intentionally connected to core academics: "It has got to be standards-based. I make the teachers use the core curriculum or the new core curriculum along with the standards, but they have to give me standards." The principal showed the interviewers the standards rubric that the teacher submitted for Blip Blip Submarines: "Here it is. She had standards for inquiry 1 to 6, technology strands 1 to 2, reading comprehension standard 12, fiction, and writing composition."

Key Theme: Academic Support Time Used to Fill Gaps in Understanding

Some, but not all, students at Silvia received dedicated academic support. Those students identified as "at risk" according to their performance on periodic math assessments were assigned to receive academic support, called Interventions, which were taught twice a week by the math teacher, the special education teacher, and on one of the two days, by the math coach. According to the principal, students were reassessed every six weeks and could be reassigned or removed from Interventions. When eligible students were in Interventions, other fifth grade students received additional instruction in reading, writing, science, or social studies. Silvia also offers a gifted and talented program and English Language Learner (ELL) support, although these activities were not observed.

Intervention lessons were cancelled on the scheduled observation date as the math coach and teacher were both participating in professional development. Students who would have usually received math Intervention remained in classes with their homeroom and participated in Literacy and Math instruction. In one classroom led by the Literacy teacher, students worked on their compositions about battles and in their MCAS preparation workbooks. In the class led by the math teacher, students continued their work on ordering fractions on a number line before going on to work in the MCAS workbooks. The afternoon proceeded as normal for students who did not typically receive Interventions. Subsequent attempts to reschedule the observation of math Interventions between mid-March and the end of the school year were unsuccessful.

Abt Associates Inc. ELT Case Studies 2010-2011 pg. 15

Case Study: Clarence R. Edwards Middle School

School Context

The Clarence R. Edwards Middle School (Edwards) is located in Charlestown, a densely populated neighborhood of Boston. The school first received an ELT grant in 2006-07. The 2010-11 academic year was the principal's first year leading the school.

The Edwards School is housed in its original building; a three-story brick structure built in the early 1930s. There are stairwells at each end of the building and a third that bisects the school, linking the front entrance to the main office and the three floors above. The school's hallways are wide and lined with lockers. The paint on the walls is peeling in some places, but the halls are cheerily decorated with posters and hand-made signs, and despite the fact that there is little natural light in the corridors, most classrooms have large windows.

In 2010-11, Edwards served just over 500 students in grades six, seven, and eight. The demographics of the student body at Edwards closely mirror the diversity of the district. Approximately 19 percent of the students were African American and 52 percent were Hispanic. About 87 percent of Edwards students were eligible for free or reduced-price lunch, higher than the district average of 74 percent. A greater proportion of Edwards' students than district students had a first language other than English (56 percent and 45 percent, respectively). This case study focuses on 8th grade students.

School Schedule

In 2010-11, the school day at Edwards began at 7:35 and Monday through Thursday, students were dismissed between 3:40 and 4:05, depending on if they were taking the bus or not. Every Friday, students took only their four core academic courses and a specialty class before an 11:45 early-dismissal that enabled teachers to participate in in-school professional development and collaborative planning time. A sample 8th grade student schedule is shown below in Exhibit 8. Of note, Edwards allocated equal time to all subject areas, and students participated in both academic support and enrichment four out of five days of each week.

Abt Associates Inc. ELT Case Studies 2010-2011 pg. 16

Exhibit 8. Sample Edwards Daily Schedule, 8th Grade, 2010-11

	Monday–Thursday		Friday
7:35-8:05	Study Hall	7:40 – 8:40	Science
8:05-9:05	Science	8:40 – 9:20	Social Studies
9:10-10:10	Social Studies	9:20 – 10:00	Physical Education/Chorus/Art
10:15-10:40	Lunch	10:00 – 10:25	Lunch
10:40-11:40	Physical Education/Chorus/Art	10:25 – 11:05	ELA
11:40-12:40	ELA	11:05 – 11:45	Math
12:40-1:40	Math		
1:40-2:40	Academic Leagues		
2:40-4:20	Electives		

Key Theme: Across Core Academic Classes, Teachers Used Common Instructional Practices

All core academic classes observed began in the same way. Teachers indicated the objective of the day's lesson, often on the blackboard, and assigned students an activity to do immediately upon entering the

room, called a "Do Now." Students across classes completed their work in matching composition notebooks, gluing handouts in and building a common table of contents on the front page.

During each of the 12 observed core academic classes, students experienced multiple instructional strategies and were grouped in multiple ways. For example, in one class, the teacher presented a PowerPoint presentation to the entire class, students engaged in small group discussion, students worked individually, and then students were invited to present and discuss their work with the class. In another class, students took a quiz, worked in pairs on a problem-solving activity, worked in small groups with the teacher who circulated to provide instruction, and responded to answers with the whole class.

A teacher says, "we want to prove today that food contains energy. Well, we've already done that in our lab by burning a cheese ball. How do we know that the food contains energy?" The student responds "because it burned." The teacher continues, "right, we can't just create heat energy out of nothing, so the energy is stored in the food, and then it burns, and then what?" Another student answers "the water." The teacher probes, "right, what happened to the water?" The student answers that the water got hotter.

Core academic classes featured predominantly whole-class discussion, although other instructional strategies were also observed across the school day. Whole class discussions took multiple forms and had a variety of learning objectives, including: a teacher peppering a lecture with questions that checked student understanding, students sharing their work with the class, and a semi-structured conversation that attempted to solve a problem or answer a question. The common characteristic across this instructional mode was that the teacher made a concerted effort to elicit student participation during a lesson presented to the entire class.

"If you've finished with the quick write, go on with your open response," the teacher instructs. One student pipes up, "Do I have to restate the question?" The teacher responds: "Don't recopy, just restate, so that they know that you understand the question."

Across observed classes, teachers structured opportunities for students to practice academic skills. In each of the 12 core academic classes observed, students spent some portion of the class time practicing skills such as graphing parabolas, writing short compositions, and applying scientific formulas to mathematical calculations. In most classes, some component of skills practice emphasized preparation for the MCAS. For example, in all three ELA classes, students wrote 'open responses,' a description of a composition consistent with the language of MCAS testing. Also of note, of all the core academic subjects, there were

fewer opportunities for skills practice in social studies than in other classes, although social studies is not a subject area addressed on the MCAS. The more frequently observed learning objectives of lesson activities in social studies classes were 'introduction of new content' and 'application of concepts or critical thought.'

Key Theme: Student Engagement Appeared Related to Lesson Structure and Student-Teacher Relationship versus Time of Day

Data from both field notes and the ESSE indicated that most Edwards students were generally engaged throughout the day. Field notes from classroom observations suggested that student engagement was positively affected by warm student-teacher relationships, and negatively affected by lessons that had considerable amounts of unstructured time.

ELA classes, according to ESSE scans, had the highest levels of student engagement, and the lowest observed proportion of students who were off-task of all core classes (85 percent and 9 percent, respectively). Across all three ELA classes, researchers noted consistently positive interactions between the students and their teacher. One teacher greeted students informally and individually as they entered the room. His lesson provided students with the opportunity to reflect on personal experience and connect it to the curriculum. He shared personal stories with the class, and invited students to do the same. The amicable relationship between this teacher and his students was also supported during student focus group discussions. One of the students noted that he could talk to the teacher about anything, and several others stated that he always smiled and described him as being full of energy.

The teacher and a teaching assistant circulate to see if there are any questions. One team is not working together or communicating for five minutes or more until a teaching assistant notices this and moves one student so that she is facing the other two. Most of the teams are three students sitting in a line side by side. In many of the teams, one student seems to be taking the lead writing out x and y values, sometimes another is setting up the x-y axes, but often one or two of the other team members looks disengaged from the process. One team seems to have three boys working independently each with their own whiteboards.

The extent to which teachers emphasized MCAS preparation during core academic classes may be in part influenced by the timing of the observation; classes were observed approximately one month before students were scheduled to take the MCAS.

Another class in which observers noted that student engagement was high and teacher-student relationships were positive was a music class. Students sang and tapped their feet. They asked for the opportunity to sing solos and volunteered ideas to improve each musical piece. They displayed excitement: clapping, and singing to themselves between 'takes' of each song. The ESSE data aligned with the field notes in that the proportion of students classified as being on-task was quite high (86 percent).

Fewer students seemed to remain on-task and engaged in any class when the assigned activity took less time to complete than was allotted. In one core academic class, for example, students who had solved all assigned problems talked with one another while they waited for the teacher to check their work or assign new problems. In another class, the teacher used an electronic polling exercise with individual handheld remotes, but allotted for some students far more time than necessary to submit a response, which resulted in periods of disengaged time.

Observers noted that, across classes, students working in small groups also frequently disengaged from the assigned task and began to socialize with one another. In several instances, this phenomenon seemed to be related to the structure of the assigned activity. In one math class, for example, pairs or groups of three students plotted graphs on individual-sized whiteboards. Each member of a pair had a clear task: one to calculate the points on the graph and the other to draw, whereas groups of three had one more person than task. Consequently, the third student lacked a defined role, and instead chatted with his or her group or appeared to stare into space. In other classes, students working in small groups seemed to veer off task more easily because the teacher was circulating from group to group.

Key Theme: Student Engagement in Enrichment Programming Varied

Edwards students participated in enrichment programming Monday through Thursday. The principal explained this scheduling choice: "Edwards is what it means to be 11, 12, or 13 for these kids. They are here all the time, and we're trying to give them all the opportunities that their upper middle class peers get...We believe in the development of the whole child." Students had the opportunity to choose which elective classes they took; the typical student selected two electives per semester, each meeting twice per week. Enrichment classes were taught both by school staff and by community partners.

Researchers observed three different Enrichment classes at Edwards: 1) Stepping; 2) Dance; and 3) Student Leadership. An Edwards' teacher taught Stepping and community partners lead the other two. Both the ESSE and observer field notes revealed notable variation in student behavior and engagement across enrichment classes (Exhibit 9).

Abt Associates Inc. ELT Case Studies 2010-2011 pg. 19

Exhibit 9. Students Behavior During Enrichment Classes, Edwards

Average proportion of time students were:	Dance (n=10)	Stepping (n=9)	Student Leadership (n=9)
On-Task	75%	93%	58%
Off-Task	2%	7%	33%
Being Disciplined	0%	1%	11%

Notes:

- 1. Percentages do not total to 100% because students could also be coded as "in transition," which was a separate category of behavioral activity.
- 2. Sample sizes represent the total number of sweeps of classroom activities conducted by observers.

In the Stepping class, students focused on the task of mastering the routine in preparation for a series of performances and competitions. They taught one another the steps, working in small groups inside and outside the classroom practice space. They demanded the attention and focus of peers. The single instructor successfully managed a class of 40 students. Field notes from Stepping emphasized student engagement, leadership and peer teaching and learning. Results of the ESSE scans aligned with the field notes; the observer recording the engagement data captured relatively low levels of off-task behavior and discipline compared to the other Enrichment classes observed on the visit (Exhibit 9).

Student engagement during the observed Student Leadership class was relatively low (Exhibit 9). Student Leadership class members were observed as frequently off-task and, at times, disrespectful of the instructor, a staff person from a community partner organization. The instructor peppered the Leadership class with warnings and lectures about respect. In one instance, a student laughed in response to the teacher's scolding. The observer noted a steady flow of students in and out of the classroom.

Student engagement in the Edwards Dance class was mixed; students were unenthusiastic yet compliant participants. The ESSE data indicated that, on average (across the observational sweeps), students were on-task during the Dance class 75 percent of the time.

Key Theme: Academic Support Classes Featured Independent Student Work

At Edwards, students had one hour of dedicated academic support classes four times per week. The school used MCAS data, as well as data from assessments performed every six weeks by the Achievement Network, an outside contractor, to place students in these classes. Students were placed either in Math Support, ELA Support, or, if they scored Proficient or Advanced in both subjects on the MCAS test, Science Support class. Within subjects, students were grouped according to performance; those closest to achieving proficiency were grouped together, and those requiring more support and attention were in a separate group.

Researchers observed three Academic Support classes at Edwards: one Math, one ELA, and one Science. In each of these three classes, students worked predominantly on independent work. Exhibit 10 details the proportion of students engaged in various activities and the instructional groupings in which they worked during Academic Support classes. Scans of the Academic Support classrooms aligned with observers' field notes regarding the proportion of time students spent working alone, and on worksheets (53% and 83%, respectively). Of note, these proportions were much higher for academic support classes alone than they for classes at Edwards overall.

Exhibit 10. Distribution of Instructional Modes and Groupings in Academic Support Classes, Edwards

	Class	Туре				
	Academic Support (n=28)	All Classes (n=159)				
Panel 1: Average proportion of time students engaged in instructional activities:						
Using Book or Worksheet	83%	37%				
Listening	13%	36%				
Talking	5%	26%				
Hands-On Activities	0%	21%				
Panel 2: Average proportion of time	students spent in instructional	groupings:				
Whole Class	11%	45%				
Small Group	18%	19%				
One-on-One	3%	1%				
Independent	53%	29%				

Notes:

- Percentages do not total 100% because students could participate in multiple types of activities or instructional groupings.
- Sample sizes represent the total number of sweeps of classroom activities conducted by observers.
 Core classes included: ELA, math, science, and social studies. Enrichment classes included Dance, Stepping, and Student Leadership. Specials included art, chorus, and health. Academic Support activities included Math Support, Science Support, ELA Support, and study hall.

In Math Support, students worked through 'Saxon Math' practice books. In the ELA and Science Academic Support classes, the independent skills practice was geared specifically towards MCAS preparation, with students working through sample questions from previous tests. During all three observed Academic Support classes, students were expected to work silently on handouts or in workbooks.

Limited one-on-one instruction was documented in observer field notes. Teachers engaged individually with students primarily when students asked questions. . During the ELA and Science support classes, the

direct instruction often referred to test-taking strategies rather than subject-based content knowledge or academic skills. In one (of three) observed Academic Support classes, the instructor's own area of expertise was in a different subject than the content of the Academic Support class.

ESSE data indicated that student engagement varied considerably; in some classes, substantial proportions of students were observed as off-task (Math Support), and in others, students were less off-task (Science Support). Across all three academic support classes, observers described student behaviors such as putting their heads on their desks, doodling, and having side conversations with friends.

The teacher reminded students that if they were confused about answer choices for vocabulary items with fill-in-the-blanks, they could go back and replace the item in the relevant paragraph to see if the new vocabulary word worked. Plus, he said, if two answer choices meant the same thing (like "benefit" and "advantage"), then both those items must be incorrect.

Cross-Site Conclusions

Across the three case study schools, researchers observed instruction provided to students in 65 different class periods. The observations captured a wide range of academic content, learning objectives, planned activities, and student behavior. The implementation of academic support and enrichment varied substantially across the three schools. Student engagement was, perhaps not surprisingly, also variable both across schools and within schools. We want to note that these case studies are based on observations of a particular grade (5th or 8th depending on the school) for a small number of days and subset of classes, so the data described in this report may or may not be representative of students' typical instructional experiences.

As these individual case studies demonstrate, there is both considerable variation *across* three Massachusetts ELT schools implementation of particular components (i.e., enrichment and academic support) as well as considerable variation *within* these three schools in terms of approaches to instruction and student engagement. Below, we highlight five findings from the case studies that emerged from the comparison of the three schools to one another.

Rapport between Teachers and Students Seemed to Affect Student Engagement

At each school, high levels of student engagement were observed in classrooms where teachers had carefully planned and executed lessons. Additionally, there appeared to be positive relationships between students and teachers in those classrooms where students were more engaged (although we are not assigning causality in *either* direction). Students did not appear to be more engaged in one subject within or across schools or one type of class (e.g., enrichment, core academic class, special). Student engagement levels were not sensitive to the time of day. Below are illustrations from the three schools focused on variation in student engagement, student-teacher rapport, and lesson structure.

At Edwards, students appeared more engaged in certain content areas during the lessons observed: English Language Arts (ELA), Chorus, and Step. In ELA, students participated in a short, independent writing activity, a whole class discussion about the themes from the chapter that they had recently read, another individual writing activity, and finally, presented their written reflections to the class. The teacher had a warm affect, and focus group students confirmed that they felt comfortable talking with this teacher. When students needed to be redirected, he spoke to them quietly and individually, affirming when they had refocused their attention on their work. No student was criticized in any of the three ELA classes observed by the research team. Across both the narrative and ESSE data collection activities, the observers recorded higher student engagement.

Similarly, the chorus class at Edwards was characterized by high levels of student engagement. Throughout the chorus class, students sang medleys of popular songs. They volunteered to sing solos and made suggestions for the improvement of the arrangement, which the teacher accepted. Students joked with their teacher, who joked back, and the tone of the class was jovial. The class also contemplated entering a choir competition to win a cash prize for the music department.

Other observed classes at Edwards showed lower levels of student engagement. In all three social studies classes observed by the research team, students appeared to disengage from the lesson because they could not hear a video presentation. Additionally, several opportunities for group work allowed students to

Abt Associates Inc. ELT Case Studies 2010-2011 pg. 22

interact socially as well as academically. In all observed math classes, teacher-student relationships were not positive; students appeared disengaged, spoke amongst themselves between exercises, and were frequently reprimanded for lack of focus. One enrichment class instructor, a community partner, appeared to have arrived without materials prepared for students. During that session, students entered and exited the room frequently, the noise level was high, and the instructor frequently raised his voice. While the lack of engagement in this situation may be explained by any number of factors, it is possible that disinterest could also in part be explained by the age of middle school students (Edwards is the only middle school featured in this report).

During the classes observed at Whelan, students appeared most engaged when lessons flowed dynamically from one activity to another. Students who finished early in a math class were invited to play a math fraction game while the teacher reinforced key concepts with a group of students who were still struggling with the lesson. This teacher rarely disciplined students; a simple mention of the student's name mid-sentence was enough to get them back on task. In a social studies class, students worked in groups to review for a test. Each student was given a role within their group, and throughout the exercise students appeared engaged and on task—vying for opportunities to contribute and having on-topic side conversations about relevant content. In a third class (enrichment), students interacted casually and quietly with their teacher, who demonstrated an interest in their work. There were few instances of teachers disciplining students within these three classes, and students were rarely 'off-task' according to ESSE scans.

The level of student engagement was lower in other observed classes at Whelan. One teacher directed the students (in multiple classes) to "sit straight, with their spine against the chair." While observers did not notice that students actively misbehaved in these classes, student engagement was lower, on average, and more students were observed staring into space, or sitting quietly, looking at their books or putting their heads down without working. Another example of off-task student behavior occurred in an academic support class, where students were initially excited about building circuits, but lost interest and did not complete the assigned structured activity because timely instructions were not provided by their teacher. Though students were engaged, they were repeatedly stopped by their teacher and reprimanded for rushing through the exercise without following directions.

At Silvia, high levels of student engagement were observed in art and in literacy and science classes taught by one teacher. Students in this teacher's classes appeared to be consistently working on the task assigned by their teacher, who recognized and affirmed students for their dedicated effort as well as their academic achievement. In one literacy class, students were promised extra time on a test, and were told not to rush or worry. In another of this teacher's observed classes, students closely followed directions to build and map terrariums. Similar patterns were observed in an art class, where the teacher circulated around the room throughout the lesson, and praised each student's work. Though students chatted socially with one another throughout the class, they also worked on their assignments, seeking one another's opinions and advice.

Lower levels of student engagement were observed in another teacher's classes, where students were largely expected to work independently while the teacher conferenced with individual students. Students working independently were observed chatting with peers, doodling, and looking at off-topic websites on the computer. Several times, the teacher reprimanded the students, and students temporarily quieted down although they were not observed completing their assigned work. The same patterns were observed in

other subject areas taught by the same teacher; in one activity, a majority of students appeared to be engaged, and in the other activities, students appeared to be off-task. Similarly, observers noted that students tended to be off-task or non-participatory in a music class in which the teacher was very stern with the students. Field notes indicated that there was only one activity during the music class that seemed to engage more than half of the students.

Academic Support Implementation Varied by School Type

In addition to allocating more time, on average, to ELA and math instruction than middle schools, the elementary schools we observed allocated less time to dedicated academic support classes than did middle schools. This finding is consistent with data presented in the final report of the multi-year Abt ELT evaluation; elementary school students spent, on average, 45 minutes less, per week, in academic support compared to middle school students (2 hours, 39 minutes and 3 hours, 25 minutes, respectively). The larger study found that only two-thirds of fifth grades in ELT schools had academic support, while more than four-fifths of 8th grades allocated time this way.

Academic support at the elementary schools was qualitatively different than at the middle school. In the elementary schools researchers visited, the structure of academic support varied. At both schools, small groups of students were pulled out of their core academic classes to work on foundational skills. This pull-out support was provided to only a small subset of students. Additionally, all fifth grade students at Whelan participated in academic support taught by their homeroom teachers three times weekly. According to the principal, teachers took turns planning academic support lessons in their individual subjects, and shared their lesson plans with one another. Notably, this meant that homeroom teachers were leading dedicated academic support for subjects that they did not regularly teach—the math teacher taught social studies support and vice versa. Students at Edwards (the middle school included in these case studies) were assigned to academic support classes based on assessment data, with students grouped by ability level and assigned to receive support in the content area in which they needed the most help. According to the principal, students were reassessed periodically and could be reassigned to different support classes based on their progress.

Because students at Edwards regularly changed classrooms and learned with different groups of peers, and because academic support at Edwards was provided in a variety of subjects, it was possible for students to be grouped according to assessment data and taught by subject-certified teachers. It is important to note, however, that at least one of the academic support periods researchers observed at Edwards was not taught by a subject-certified teacher. At elementary schools, however, students tended to be grouped heterogeneously in homerooms, and generally traveled across subjects as a class. Elementary school student homerooms therefore received instruction in one subject at a time, regardless of individual student need.

Additionally, at both of the elementary schools visited, individual teachers were specialized, typically teaching only one or two subjects. Students at Whelan who received academic support from their homeroom teachers invariably received instruction in subjects not typically taught by their teacher. According to the one of the teachers at Whelan, the school was hoping to change to assessment-based grouping of students for academic support in the future.

MCAS Preparation Was an Important Focus Across Schools

At all three schools, observers noted a focus on MCAS tests during core academic classes, academic support classes, or both. It is worth noting that researchers visited these schools during the six to eight weeks preceding the administration of these statewide assessments; this timing may have contributed to the prevalence of MCAS preparation.

At Edwards, explicit preparation for the MCAS occurred exclusively in academic support periods; in two of three observed classes, students used old MCAS tests as practice material, and the third practiced math questions in notebooks not explicitly related to MCAS, but that mirrored the test in both content and structure. In several core academic classes, more subtle references to and practice for MCAS were observed. In ELA, compositions or essays were referred to by the teacher as "open responses." The same language is used to describe long-form written responses on the MCAS.

At the other schools, references to MCAS occurred throughout the day. At Whelan, students working on an online science quiz program were reminded by their teacher that "these [were] exactly the types of questions that they would find on MCAS." In ELA, students completed a similar online assessment comprised of multiple choice questions. When asked whether or not the online assessment was MCAS practice, the teacher replied that "everything we do here is MCAS practice." At Silvia, the prevalence of MCAS preparation was even more pronounced. Students worked on MCAS preparation exercises in literacy and reading blocks, and posters in the classroom guided students through the "MCAS practice protocol."

The prevalence of MCAS preparation at all three schools is unsurprising, both because the test was quickly approaching and because MCAS test scores are relevant to a school's attainment of annual yearly progress (AYP). A school's continued failure to meet AYP can have significant consequences (e.g., negative publicity, among other things, as well as closure or restructuring). In their performance agreements with ESE, ELT schools set additional targets for improvements in test scores. Failure to meet the goals set out in the performance agreements can jeopardize a school's ELT funding.

Use of Data to Guide Instruction Was Observed Across Schools

At all three schools, observers noticed evidence that teachers throughout the school were using data to inform instruction. At Edwards, a bulletin board in the principal's office depicted each student's achievement test results over time. Students, each represented by a post-it note, advanced from red to yellow to green as their scores on recurring assessments improved. Edwards was a member of the Achievement Network, an organization that administers assessments and analyzes student data for member schools. Edwards used these data to group students in the appropriate academic support classes.

At Whelan, observers watched on ELA class complete an online reading comprehension assessment. This assessment entered student data into an online database that tracked students' progress over time and that the teacher could use to identify gaps in skill and understanding. Additionally, Whelan (and all schools in Revere) partners with the Bay State Reading Institute (BSRI), a non-profit organization that administers and analyzes student assessments and provides instructional leadership and coaching based on the data.

At Silvia, displays in both individual classrooms and in the school's main hallway signaled the school's attention to data. On the school's main display, each student was represented by an arrow on a target, the

center of which represented proficiency on the MCAS. In individual fifth grade classrooms, posted pie charts indicated the proportion of students on track to achieve proficiency. In addition, researchers observed one class complete a Group Reading And Diagnostic Evaluation (GRADE) assessment. The GRADE is designed to identify gaps in foundational literacy skills and can provide instructors with targeted follow-up materials.

Enrichment Perceived Across Schools as Fun and Opportunity to Strengthen School Connections

Researchers observed multiple enrichment classes at all three schools, and interviewed particular students and staff about aspects of the school's enrichment program. At all three schools, student articulated that enrichment classes were "fun" and enabled them to build connections to the school and staff. It should be noted, however, that only a small number of students were interviewed at each school, and their responses cannot be assumed to represent the experiences of all students in the grade.

At Edwards, students in the focus group indicated that "electives made school interesting and unique." One student noted that "school doesn't have to be for learning, it can be fun too." Another student told a story about walking to soccer practice with his soccer coach. The coach noticed a group of kids smoking, so they decided to walk a different route. While taking the other route, the coach and student had the opportunity to discuss smoking in the student's peer group.

At Whelan, students in the focus group consistently described their once-weekly enrichment as "time to have fun and relax." Two students remarked that enrichment time helped them to enjoy school more overall, and two others described positive relationships with enrichment activities compared to core academic classes even when the same teacher taught both types of class. One student explained that "the (core academic) teacher, in (core subject) she yells a lot, and everyone thinks she is mean, but in (enrichment class) she is really nice and not strict. We got to keep some of her craft supplies and put some music on of our choice."

At Silvia, students also described the positive effect of enrichment. They discussed enrichment as an opportunity to have fun at the end of the day and as an activity that caused students to enjoy school more. One student further described how learning to knit in her enrichment class enabled her to connect more closely with her grandmother, and another noted that he liked having teachers for enrichment that were new and different from his core academic classes.

Across schools, the student experience of enrichment appeared to be a positive one that helped establish students' connection to school, to their teachers, and to other caring adults.

Abt Associates Inc. ELT Case Studies 2010-2011 pg. 26

Conclusions and Areas for Future Study

This set of case studies provides illustrative data about time use, instruction, and student experiences in three purposively selected schools. What the research team observed in these three schools is not representative of all students' experiences, either in just these three or across other ELT schools over the course of a school year. Additionally, measuring certain aspects of time use is challenging. Definitions of various academic and enrichment components and activities are not consistent across schools and it is difficult to collect comprehensive information on a prototypical student with schedule variation across and within grades and throughout the academic year. The school profiles highlight qualitatively distinct approaches to ELT implementation within and between schools. The findings from the case studies also suggest additional questions for future study.

Across these three schools, use of time, approaches to academic support and enrichment, and engagement of community partners varied considerably. Whelan's longer ELA and Math blocks for fifth grade students could accommodate lessons comprised of several shorter activities that catered to a range of learning styles and targeted a range of skills. Silvia allocated more time to ELA than did Whelan, although the ELA content was distributed across three discrete subjects: Literacy, Writing, and Elements of Reading. Students in these classes focused intently on one narrower content area at a time. Edwards allocated time equally across subject areas, although that time allocation may well be more typical of middle school schedules in general. Edwards' one hour class periods, especially considering the time lost to transitions, represented 20 minutes less, on average, than Whelan's 80-minute classes. However, the Edwards schedule included more time for Science and Social Studies than did either of the two elementary schools.

Each Edwards student also received an hour of Academic Support instruction four days each week. The elementary schools, on the other hand, both relied, at least in part, on a pull-out academic support model for a subset of students. Silvia provided math "Interventions" to a small group of fifth graders while the remaining students received additional time in other subjects. Whelan employed a hybrid model which provided both pull-out academic support to struggling students and scheduled dedicated academic support time to all fifth graders several times a week.

Enrichment varied across the three schools both in intensity and in purpose, as reported by teachers and principals. Edwards scheduled over an hour of enrichment four days a week. The principal described this choice as motivated by a desire to develop the 'whole child' and provide otherwise unavailable opportunities to students. At Whelan, weekly one-hour enrichment classes were described by teachers as an opportunity to develop more relaxed relationships with students. Students, too, acknowledged the value of 'having fun' at school. Silvia's weekly enrichment classes were characterized by an attempt to build connections between student-selected topics to core academic content. This objective was reiterated by both teachers and the principal.

Edwards engaged community partners in the school schedule, whereas both Whelan and Silvia, according to principal interviews, had decided not to employ community partners for different reasons; at Whelan, because teachers were perceived as better able to manage student behavior, and at Silvia, because there were not many local community partners with whom the school could connect and transporting students to outside partners raised cost barriers.

Abt Associates Inc. ELT Case Studies 2010-2011 pg. 27

Site visits to the three ELT schools highlighted several interesting questions for future research, including questions that could potentially be addressed either through similarly intensive case study approaches or broader-based data collection strategies. There may be additional questions that could be pursued, but among the questions generated by this exploratory examination are the following:

- How much of the variation in approaches to time use is associated with ELT status, and how much is associated with other school characteristics?
- How much is time use driven by the grade level configuration rather than other school characteristics?
- How do student outcomes vary as a function of variation in instructional approaches, such as varied instructional groupings, nature of class assignments, and teaching styles?
- How do student academic outcomes vary as a function of how time is allocated across academic content, academic support, and enrichment classes—especially for students at risk academically?

We hope that the descriptions of this set of schools, selected because they have been found to use all or some components of ELT effectively, can contribute to a growing understanding of expanded learning time from a student lens, share best practices, guide technical assistance, and inform future decisions about policy and program development.

Massachusetts Expanded Learning Time (ELT) Appendix A. Implementation Index, 2009-10

Abt Associates Inc.

Massachusetts Expanded Learning Time (ELT) Implementation Index,

ACROSS ALL CRITERIA: Level 0 – Insufficient evidence of fidelity

1. School-wide Academic Focus

• Level 1 – PRESENT

- o School-wide academic focus is identified consistently by principal and the majority of teachers (>50%). [TS 26, 26a (25, 25a)⁸; PI 4; MC 7]⁹
- Academic focus goals and/or student performance data are posted publicly in the school or focus goals are widely disseminated/shared with the school community in some other way. [PI 5e, 5f; MC 8e, 8f]

Level 2 – PRESENT and LINKED TO INSTRUCTION

- School-wide academic focus is identified consistently by principal and the majority of teachers (>50%).
- o Academic focus goals and student performance data are posted publicly in the school or focus goals are widely disseminated/shared with the school community in some other
- The majority of teachers (>50%) report instructional practices are influenced by schoolwide academic focus. [TS 27b (26b)]

Level 3 – PRESENT, LINKED TO INSTRUCTION and REGULARLY MONITORED

- o School-wide academic focus is identified consistently by principal and the majority of teachers (>50%).
- o Academic focus goals and student performance data are posted publicly in the school or focus goals are widely disseminated/shared with the school community in some other
- The substantial majority of teachers (> 75%) report instructional practices are influenced by school-wide academic focus.
- o The principal and majority of teachers (>50%) report data related to school-wide academic focus are used to monitor student progress and influence instructional practices. [TS 27c, 27d, (26c, 26d), PI 5d*; MC 8d*]

Throughout this document, ELT teacher survey question numbers are first referenced followed in parentheses by MC teacher survey question numbers.

Key to data collection sources throughout document as follows: TS = Teacher Survey, PI = Principal Interview, MPS = ELT Principal Survey Conducted by Mass 2020, MC = MC Principal Interview Conducted by Abt, ELT = ELT Coordinator Interview. Data sources are listed the first time each criterion appears. Qualitative data that have not yet been incorporated into the index frequencies are noted with asterisks.

2. Core Academics in Target Grades¹⁰

TIME

- Level 1
 - Students receive at least 350 minutes of ELA instruction per week. [MPS 2.2a; MC 3
 - Students receive at least 350 minutes of math instruction per week. [MPS 2.2b, MC 3 (math)]
- Level 2
 - Students receive at least 350 minutes of ELA instruction per week.
 - Students receive at least 350 minutes of math instruction per week.
 - o Students receive at least 150 minutes of science OR social studies instruction per week. [MPS 2.2 c; MC 3 (science), MPS 2.2 d; MC 3 (social studies)]
- Level 3
 - o Students receive at least 350 minutes of ELA instruction per week.
 - o Students receive at least 350 minutes of math instruction per week.
 - o Students receive at least 200 minutes of science OR social studies instruction per week.

IN ADDITION TO TIME

- Level 1 SUPPORT
 - o The majority of teachers (>50%) report teachers receive support directed at making improvements in the quality of their academic instruction from at least two sources (support may be from academic coaches, PD, principal and/or peers). [TS 9 (9)]
- Level 2 SUPPORT, and INSTRUCTIONAL PRACTICE
 - The substantial majority of teachers (>75%) report teachers receive support directed at making improvements in the quality of their academic instruction from at least two **sources** (support may be from academic coaches, PD, principal and/or peers).
 - The substantial majority of teachers (> 75%) report that they are able to do at least two of the three following: (1) use different instructional strategies (e.g., project-based learning, small-group learning), (2) cover sufficient instructional material, and/or (3) differentiate instruction for students of differing abilities. [TS 8a, 8b, 8c (8a, 8b, 8c)]
- Level 3- SUPPORT and INSTRUCTIONAL PRACTICE
 - The substantial majority of teachers (>75%) report teachers receive support directed at making improvements in the quality of their academic instruction from at least two **sources** (support may be from academic coaches, PD, principal and/or peers).
 - The substantial majority of teachers (> 75%) report they are able to do all three of the three following: (1) use different instructional strategies (e.g., project-based learning, small-group learning), (2) cover sufficient instructional material, and/or (3) differentiate instruction for students of differing abilities.

This criterion pertains to students in grades 5 and/or 8 only.

3. Enrichment Activities in Target Grades¹¹

TIME

Level 1

- School offers at least 45 minutes per week of enrichment activities for students consistently throughout the year. [MPS 2.2g, 2.2h; MC 3 (Academic Electives, Extracurricular Electives)]
- School offers at least 45 minutes per week of "specials," including physical education, art, music, technology, health, and/or library. [MPS 2.2e; MC 3 (specials)]

Level 2

- School offers at least 90 minutes per week of enrichment activities for students consistently throughout the year.
- School offers at least 90 minutes per week of "specials," including physical education, art, music, technology, health, and/or library.

Level 3

- o School offers at least 135 minutes per week of enrichment activities for students consistently throughout the year.
- o School offers at least 135 minutes per week of "specials," including physical education, art, music, technology, health, and/or library.

IN ADDITION TO TIME

• Level 1 - ACCESS TO ENRICHMENT and CHOICE

The majority of teachers (>50%) agree that all students have access to high-quality enrichment activities and/or that all students are equally able to participate in enrichment activities [TS 20a (19a); 20b (19b)]

Level 2 - ACCESS, CHOICE, and FOCUS

- The majority of teachers (>50%) agree that all students have access to high-quality enrichment activities and/or that all students are equally able to participate in enrichment activities
- o A majority of teachers (>50%) report that students **and/or** teachers have some choice about the enrichment activities they are involved in [TS 20c, 20d (19c, 19d)]
- The majority of teachers (>50%) agree that enrichment activities are well integrated into the school schedule [TS 20g (19g)].

Level 3 ACCESS, CHOICE, FOCUS, and INTEGRATION

- The majority of teachers (>50%) agree that all students have access to high-quality enrichment activities and that all students are equally able to participate in enrichment activities
- o The majority of teachers (>50%) report that students **and/or** teachers have some choice about the enrichment activities in which they are involved.
- The majority of teachers (>50%) agree that enrichment activities are well integrated into the school schedule.

This criterion pertains to students in grades 5 and/or 8 only.

The majority of teachers (>75%) report it is very or somewhat accurate that enrichment activities are influenced by this year's academic focus [TS27e (26e)].

4. Teacher Leadership and Collaboration

TIME

- Level 1
 - The majority of teachers (>50%) report attending collaborative planning meetings with other teachers at least monthly for at least 45 minutes of common planning time (CPT). [TS 21, 22 (20, 21)]
- Level 2
 - The majority of teachers (>50%) report attending collaborative planning meetings with other teachers at least twice monthly for at least 45 minutes of CPT.
 - The majority of teachers (>50%) report that so far this school year, collaborative planning time has been replaced with an unrelated activity or responsibility (e.g., serving as a substitute teacher, attending a student disciplinary meeting) never or 1-3 times. [TS 24 (23)]
- Level 3
 - The majority of teachers (>50%) report attending collaborative planning meetings with other teachers at least once a week for at least 45 minutes of CPT.
 - The majority of teachers (>50%) report that so far this school year, CPT has been replaced with an unrelated activity or responsibility (e.g., serving as a substitute teacher, attending a student disciplinary meeting) never or 1-3 times.

IN ADDITION TO TIME

- Level 1 STRUCTURE
 - The majority of teachers (>50%) report that CPT meetings: (1) generally have a structured format [TS 25a (24a)] and (2) focus on at least one of the following activities: analyzing student data, strategizing about effective instructional practices and assessments, or discussing individual student needs. [TS 23g, 23e, 23i (22g, 22e, 22i)]
- Level 2 STRUCTURE, and CULTURE OF COLLABORATION
 - The substantial majority of teachers (>75%) report that CPT meetings (1) generally have a structured format and (2) focus on at least one of the following activities: analyzing student data, strategizing about effective instructional practices and assessments, or discussing individual student needs.
 - The substantial majority of teachers (>75%) agree that CPT meetings and/or other inschool time (e.g., peer mentoring, in-school professional development) are used in ways that contribute to the development of a professional learning community of teachers. [TS 25b, 25c, 25d (24b, 24c, 24d)]
- Level 3 STRUCTURE, CULTURE OF COLLABORATION and OPPORTUNITIES FOR **LEADERSHIP**
 - The substantial majority of teachers (>75%) report that CPT meetings (1) have a structured format and (2) focus on at least one of the following activities: analyzing

- student data, strategizing about effective instructional practices and assessments, or discussing individual student needs.
- The substantial majority of teachers (>75%) report that CPT meetings and/or other inschool time (e.g., peer mentoring, in-school professional development) are used in ways that contribute to the development of a professional learning community of teachers.
- The substantial majority of teachers (>75%) report that teachers are involved in making important decisions for their school. [TS 25f (24f)]

5. School Leadership

- Level 1 DIRECTION SETTING
 - The majority of teachers (>50%) agree that the principal and/or school leadership team adapt or refine school policies and/or practices as needed. [TS 120 (12i)]
 - The majority of teachers (>50%) agree that the principal and/or school leadership team are actively engaged in school improvement initiatives. [TS 12q (12k)]
- Level 2 DIRECTION SETTING and SUPPORT FOR/INVOLVEMENT IN INSTRUCTIONAL PRACTICE AND STAFF DEVELOPMENT
 - The substantial majority of teachers (>75%) agree that the principal and/or school leadership team adapt or refine school policies and/or practices as needed.
 - The substantial majority of teachers (>75%) agree that the principal and/or school leadership team are actively engaged in school improvement initiatives.
 - The substantial majority of teachers (>75%) perceive the principal and/or school leadership team as at least two of the three following: (1) knowledgeable about current instructional practices, (2) involved in instructional leadership, and/or (3) supportive of staff growth and development. [TS 12n, 12h, 12e (12h, 12f, 12d)]
- Level 3 DIRECTION SETTING, SUPPORT FOR/INVOLVEMENT IN INSTRUCTIONAL PRACTICE AND STAFF DEVELOPMENT, and STRENGTHENING SCHOOL CULTURE
 - The substantial majority of teachers (>75%) agree that the principal and/or school leadership team adapt or refine school policies and/or practices as needed.
 - The substantial majority of teachers (>75%) agree that the principal and/or school leadership team are actively engaged in school improvement initiatives.
 - The substantial majority of teachers (>75%) perceive the principal and/or school leadership team as at least two of the three following: (1) knowledgeable about current instructional practices, (2) involved in instructional leadership, and/or (3) supportive of staff growth and development.
 - The substantial majority of teachers (>75%) describe principal and/or school leadership team as focused on strengthening the culture of the school as indicated by both of the two following: (1) receptive to feedback about morale/culture and (2) providing opportunities for staff leadership and/or recognition of successes. [TS 12p, 12r (12j, 12l)]

6. Morale/Stakeholder Satisfaction with School Environment and Culture 12

Level 1

- The majority of teachers (>50%) agree that they are very satisfied with being a teacher at their school. [TS 10b]
- The majority of teachers (>50%) agree that at least 2 of the following items are NOT a concern this year: student engagement in school [TS 7c]; teacher/staff fatigue [TS 7f]; sufficient time for common planning time or individual planning time [TS 7h, 7i]; professional development opportunities [TS 7k]; or communication with parents [TS 7ml.
- The majority of students (>50%) report agreement with at least one of the following: like being in school; look forward to going to school; like the length of the school day; think most kids like being in school; or think teachers care about students. [SS 14b, 14d, 4, 14l, 14m]

• Level 2

- The substantial majority of teachers (>75%) agree that they are very satisfied with being a teacher at their school.
- The majority of teachers (>50%) agree that at least 3 of the following items are NOT a concern this year: student engagement in school; teacher/staff fatigue; sufficient time for common planning time or individual planning time; professional development opportunities; or communication with parents.
- The majority of students (>50%) report agreement with at least two of the following: like being in school; look forward to going to school; like the length of the school day; think most kids like being in school; or think teachers care about students.

Level 3

- The substantial majority of teachers (>75%) agree that they are very satisfied with being a teacher at their school.
- The majority of teachers (>50%) agree that at least 4 of the following items are NOT a concern this year: student engagement in school; teacher/staff fatigue; sufficient time for common planning time or individual planning time; professional development opportunities; or communication with parents.
- The majority of teachers (>50%) agree that students take their school work seriously [TS 12t (12n)], treat teachers with respect [TS 12w (12q)] AND treat other students with respect [TS12u (12o)].
- The majority of students (>50%) report agreement with at least three of the following: like being in school; look forward to going to school; like the length of the school day; think most kids like being in school; or think teachers care about students.

ELT Bonus

• Level 1

The majority of teachers (>50%) reported that teachers in this school are supportive of Expanded Learning Time. [TS 12a]

The majority of teachers (>50%) reported that the principal and school leadership team set high expectations for ELT at this school. [TS 12i]

Student survey data are not currently included pending further discussion.

The majority of students (>50%) receive at least 50 minutes of academic support time per week (i.e., an extra block of academic time that targets specific academic skills based on students needs) [MPS 2.2f; MC3 (academic support)]

• Level 2

- The majority of teachers (>50%) reported that teachers in this school are supportive of **Expanded Learning Time**
- The majority of teachers (>50%) reported that the principal and school leadership team set high expectations for ELT at this school. [TS 12j]
- The majority of teachers (>50%) reported that the principal and school leadership team involve others in designing and implementing changes in ELT at this school. [TS 12k]
- o The majority of students (>50%) receive at least 100 minutes of academic support time per week (i.e., an extra block of academic time that targets specific academic skills based on students needs) [MPS 2.2f; MC3 (academic support)]

• Level 3

- The majority of teachers (>50%) reported that teachers in this school are supportive of Expanded Learning Time.
- The majority of teachers (>50%) reported that the principal and school leadership team set high expectations for ELT at this school.
- The majority of teachers (>50%) reported that the principal and school leadership team involve others in designing and implementing changes in ELT at this school.
- The majority of teachers (>50%) reported that they are satisfied with the staffing provided to cover the entire school day. [TS 16i]
- The majority of students (>50%) receive at least 150 minutes of academic support time per week (i.e., an extra block of academic time that targets specific academic skills based on students needs) [MPS 2.2f; MC3 (academic support)]

Data Source Key: TS = Teacher Survey

PI = Principal Interview (ELT) MC = MC Principal Interview MPS = ELT Principal Survey

ELT = ELT Coordinator Interview

Appendix B. Case Study Data Codebook

Code	Description
Teaching Strategies	
Hands-on Learning	Students are engaged in applied learning: experiments, art projects, computer programs, etc.
Individual seat work	Students work individually on work that requires little intervention. This may be worksheets, SSR, writing assignments, questions from textbook, etc. Check-ins by teachers do not necessarily constitute one-on-one instruction.
Collaborative group work	Group of students, without an adult, working on ONE project/task which requires all of their input and effort (four students sitting together and working on individual worksheets does not qualify)
Didactic instruction	Teacher or instructor delivers material in lecture style.
Remediation	Students (usually in small groups or individually) are being caught up on material that they have not mastered.
Large group discussion	Teacher (usually) facilitates large-group discussion that incorporates student participation, may be question-and-answer. This strategy may follow didactic presentation.
Individual instruction	One teacher or adult, one student.
Small Group Instruction	A small subset of the class' students, working directly with the teacher
Lesson Extension	A creative or hands-on exploration of a topic covered in a previous lesson or other class.
Student Experience	
Fatigue	Behaviors include: heads on desks, eyes closed, lying down, uttering "I'm tired" etc.
Engagement	Student expresses excitement about learning, appears to be on task – listens actively, asks questions, completes assigned work.
Disengagement	Student expresses reluctance to complete assigned task. Eyes wander, is unprepared to engage actively in class (e.g.: is asked to read but can't find appropriate spot on page), can't repeat recent material covered in class.
Discipline	Students' behavior is corrected OR student acts-out without correction.
Success	Students are congratulated or acknowledged for their work
No structured task	Teacher does not provide students with instructions or task. This code encompasses scenarios in which the time allotted for an activity is more than the time required for the activity's successful completion.
Alternatives to ELT	Student references an activity or relationship they would pursue absent ELT
Homework	Student or teacher references homework or school's homework policy.
Transitions	Students move between classes or subject areas.
Social Dynamics	Fieldnotes capturing social dynamics between students are coded to this node.

Code	Description
Student Teacher Interactions	
Collaborative	Teachers solicit and incorporate student ideas and feedback, ask questions, and listen to student concerns. Students ask for help or feedback from teachers. Discipline is constructive
Adversarial	Teachers' energy is focused on enforcing rules or disciplining students. Students exhibit attitude, anger or resentment towards teacher.
High Levels of Trust	Teacher provides opportunities for students to make decisions, teacher shares personal details with students.
Lack of Trust	Teacher limits student freedom or threatens students before students have misbehaved.
Lack of teacher engagement	Teacher appears disengaged from classroom activities: doesn't talk to students, stays behind desk, doesn't deliver instruction.
School Climate	
Consistent norms and expectations	Rules and expectations of student behavior are consistent between classes and types of classes (enrichment/core)
Physical space	Any reference to the school building, classroom setup, or other physical attributes of the school.
School-wide communication	Any announcement, letter, or other communication received by the whole school.
Teacher Characteristics	Physical or demographic description of the teacher.
Learning Objective	
School-wide academic focus	Does the lesson bolster the stated Academic Focus of the School?
Final project	Students are working on a final project or presentation of their learning.
Application or critical thought	Students are asked to apply previous knowledge or think critically about a subject. This could include certain types of questioning, experiments, or projects.
Strategy or skill building	Lesson attempts to build students' skills or cognitive strategies. E.g. Problems practice in math, identifying reading comprehension strategies in ELA.
MCAS	Explicit reference to preparation for MCAS
New content	Students are learning new content to which they have not been exposed. This will be <i>information</i> , not skills
Strategies	Students learn or practice strategies for test-taking
Skills Practice	Students practice skills they have previously learned. Activities could include worksheets, writing exercises, or practice problems. Work is likely to be individual.
Evaluation	Students are assessed.
Academic Support	Teachers provide struggling students with additional instruction or clarification on a skill or content area to support learning.

Code	Description
Electives	
Problem solving	Activity engages students in solving complex problems: may be math, physics, politics etc.
Team work	Activity engages students in collaborative work: e.g. sport, building project
Physical health or well-being	Activity engages students in Sports, dance, nutrition, sexual health.
Public speaking	Activity engages students in public speaking or presentation. Speech or acting, model UN (emphasizes performance)
Specific content expertise	Activity engages students in learning about specific area of interest (marine biology, culture, etc.)
Communication	Activity engages students in communication practice – e.g.: acting, model UN (emphasizes exchange of ideas with others), anti-bullying.
Student leadership	Activity engages students in leadership of others in large or small groups.
Fun	Activity aims to engage students in fun
Connection to core classes	Activity is connected explicitly to content or skills relevant to core academic classes.
Content focus	Activity develops content knowledge in specific areas of focus - may or may not be connected to core curriculum.
Community awareness	Activity facilitates student awareness of and participation in school or local community
Student placement	Any reference to how students are grouped or assigned to enrichment classes.
Logistics	Any reference to logistics associated with Enrichment programming
Source of Instruction	Any description of enrichment instructor.

Appendix C. ELT Student Scan for Engagement (ESSE)

ELT Student Scan for Engagement (ESSE)

Classroom ID	AbtClassID	
School ID	School Name	
Observer ID	Observer Name	
Date		
Grade	Room number	
Total # of students		
Time observation began	Time observation ended	

Sources consulted:

Foorman, B.R. & Schatschneider, C. (2003). Measurement of teaching practices during reading/language arts instruction and its relationship to student achievement. In S. Vaughn and K.L. Briggs (Eds.), Reading in the classroom: Systems for the Observation of Teaching and Learning (pp. 1-30). Baltimore, MD: Paul H. Brooks.

Kim, A., Briggs, K.L., & Vaughn, S. (2003). The classroom climate scale. In S. Vaughn and K.L. Briggs (Eds.), Reading in the classroom: Systems for the Observation of Teaching and Learning (pp. 83-109). Baltimore, MD: Paul H. Brooks.

Vaughn, S. (2005). Personal communication (May, 2005).

Shanahan, T. (2005). Personal communication (May, 2005)

Smith, C., Dwyer, M.C., Gamse, B.C., Dixon, Q. (2005). Developed for Reading First Impact Study by Abt Associates, under contract ED-01-CO-0093/0004. Cambridge MA: Author.

Smith, C., Gamse, B.C., Dixon, Q. (2005). Developed for Reading First Impact Study by Abt Associates, under contract ED-01-CO-0093/0004. Cambridge MA: Author

ELT Student Scan for Engagement (ESSE)

Instructions:

ESSE observations are focused primarily on students, not teacher(s).

Enter the classroom. Begin walking casually around the room looking at what students are doing during the acclimation phase. Let students become accustomed to you walking around the room. Do not impede teacher or student movement but do not sit in one location during the acclimation period. Do not interact with students. If a student makes eye contact with you, you may acknowledge the student (e.g., make eye contact) and then continue the observation. If a student talks to you, smile and respond "I can't talk with you right now, I need to continue working."

After 4 minutes, begin Sweep 1:

(If more than ½ of the students in the class are in transition, wait for 2 minutes to begin Sweep 1, If, after waiting for 2 minutes, more than ½ the students are still in transition, wait for additional two minute increment until less than ½ of the students are in transition to begin Sweep 1.

- a) Enter the class subject for Sweep 1
- b) Enter the counts for the different types of adults in the room. Other instructors may include paraprofessionals, Title 1 instructors, SPED instructors, or ESL teachers.
- Count the number of students in the classroom who are in transition. Indicate the number of students in transition on the ESSE. For any student who is in transition, do not fill in any remaining columns.
- d) Count the number of students in the room who are being disciplined. Record the number of students being disciplined on the ESSE.
- e) Record any students being disciplined as "off task" on the ESSE.
- Looking around the room, count and record the numbers of students engaged in each type of interaction, engagement and instructional grouping (e.g.: 6 students are working in a small group with the teacher, they are talking (Participatory).
- Only students in the classroom should be counted in any sweep.

Eight minutes after the start of Sweep 1, begin Sweep 2. Repeat for Sweep 3.

On-task behavior is any behavior in which a child appears to be:

- Engaged in independent, paired, small or large group learning activity;
- Paying attention to the teacher (if teacher is delivering instruction) or attending to work that is in front of him/her;
- Talking with other students about an instructional activity in which students are engaged (e.g. working productively on a group project);
- Participating in a whole class routine such as the pledge of allegiance

Off-task behaviors include:

- Not paying attention to the teacher when appropriate
- Looking around or gazing at an activity in which student is not engaged; "blank stares"
- Crying or head down with eyes covered on desk.
- Going to get new materials or put old materials away; or, wandering aimlessly
- Conflict with students or teacher
- Playing, teasing, roughhousing with other students, distracting other students
- Snack/meal times (e.g., lining up to use the rest room)

Subject(s) covered during	sweep (check all that a	apply)	
ELA (incl foreign language)	Science	Art, Music, Drama	Study skills
Math	Enrichment	Health, Physical Education	Non academic
Social Studies	Academic Support	Other elective	Other

ELT Student Scan for Engagement (ESSE
--

Class subject:	# of Primary Instructors:
	# of Other Instructors:
Time started:	# of Administrators:
	# of Volunteers:

D ''	In Transition? (If yes,		Discipline? (If yes, then	_	On	Interaction With? (mark all that apply)			Type of Engagement (mark all that apply)				Instructional Grouping (mark only one)			
Pupil	move ne stud	on to	NOT on task)			Primary Instruct or	Other Adult	Other Student	Talking (Particip atory)		Textbook/ Worksheet	Listening (Didactic)	Whole group	Small group	One on one	Indepen dent
1	Υ	N	Y N	Υ	N											
2	Υ	N	Y N	Υ	Ν											
3	Υ	N	Y N	Υ	Ν											
4	Υ	N	Y N	Υ	Ν											
5	Υ	N	Y N	Υ	N											
6	Υ	N	Y N	Υ	Ν											
7	Υ	N	Y N	Υ	Ν											
8	Υ	N	Y N	Υ	Ν											
9	Υ	N	Y N	Υ	Ν											
10	Υ	N	Y N	Υ	N											
11	Υ	N	Y N	Υ	N											
12	Υ	N	Y N	Υ	Ν											
13	Υ	N	Y N	Υ	Ν											
14	Υ	N	Y N	Υ	Ν											
15	Υ	N	Y N	Υ	N											
16	Υ	N	Y N	Υ	Ν											
17	Υ	N	Y N	Υ	Ν											
18	Υ	N	Y N	Υ	N											
19	Υ	N	Y N	Υ	N											
20	Υ	N	Y N	Υ	N											
21	Υ	N	Y N	Υ	N											
22	Υ	N	Y N	Υ	Ν											
23	Υ	N	Y N	Υ	N											
24	Y	N	Y N	Υ	N											
25	Υ	N	Y N	Υ	N											
26	Υ	N	Y N	Υ	Ν											
27	Υ	N	Y N	Υ	Ν											
28	Y	N	Y N	Υ	N											
29	Y	N	Y N	Υ	N											
30	Υ	N	Y N	Υ	Ν											

Notes:

Appendix D. Administrator and Teacher Interview Protocol

Administrator Interview Protocol ELT Case Studies – Winter 2011

Academic Support

Administrators:

- 1. How did you determine the structure of the academic support classes?
 - a. Who gets academic support
 - b. Length of time per class
 - c. Number of times per week
 - d. Whether degree of need determines dosage
- 2. Do students who receive academic support also get enrichment classes?
 - a. If yes, as much as kids who don't receive academic support
- 3. In what subject areas are academic support services provided?
 - a. How was this determined?
 - b. What are the requirements for teachers who provide academic support?
- 4. What supports do you provide teachers who are responsible for academic support?
- 5. How Do teachers who provide academic support communicate with their students' other teachers?
 - a. describe the mechanisms that facilitate communication between teachers (meetings, logs, frequency?)
- 6. How do you monitor if students are making desired progress (i.e., what measures)?
 - a. How often do you assess student progress?
 - b. Who assesses student progress?
 - c. Do students move out of academic support during the year if they meet certain benchmarks?
 - d. Do students have a role in goal setting or tracking progress?

Enrichment

- 1. Describe the relationship between your school's enrichment options and the school's academic focus.
- 2. Describe the relationship between enrichment options and the core academic curriculum.

- 3. What do you hope students will get out of enrichment?
- 4. How similar/different are the norms and expectations for enrichment and core curriculum classes?
- 5. How do you assess the quality of enrichment programs?
 - a) What programmatic changes, if any, happen as a result of the assessment?
- 6. What is the impact of enrichment on the school climate?
- 7. How do the students present their enrichment achievements?

Teacher Interview Protocol ELT Case Studies – Winter 2011

Academic Support

- 1. What are the goals of academic support?
 - a. How is progress towards these goals monitored?
- 2. In what subjects do you provide academic support?
 - a. What subject do you typically teach?
 - b. In what subject are you licensed?
 - c. How many years have you been teaching?
 - d. How was it decided which academic support class you would teach?
- 3. What supports are offered to you to improve the quality of the academic support you are able to provide? ... Which supports have you used this year and/or found useful?
- 4. How are students grouped for academic support blocks?
 - a. In your opinion, is this grouping effective?
 - b. How often are students' groups changed?
- 5. How do you communicate with students' other teachers about students' performance across different subject areas and contexts?
 - a. How often do you check in with other teachers?
 - b. What kind of information do you share/receive from other teachers about the students to whom you provide academic support?
- 6. How does the content of academic support classes relate to the content of core curriculum courses?
- 7. Describe the last academic support class you taught.
 - a. What were the main objectives?
 - b. What activities did you do?
- 8. How often do you assess students' progress or mastery of a concept?
 - a. How is this assessment done?

Enrichment

- 1. Describe the relationship between your school's enrichment options and the school's academic focus.
- 2. Describe the relationship between enrichment options and the core academic curriculum.

- 3. What do you hope students will get out of enrichment?
- 4. [Only if interviewing school staff (not community partner)] How are your relationships with students similar/different in regular and enrichment classes?
- 5. [Only if interviewing school staff (not community partner)] How similar/different are the norms and expectations for enrichment and core curriculum classes?
- 6. How do the students present their enrichment achievements?

Appendix E. Student Focus Group Protocol

Student Focus Group Protocol ELT Case Studies Winter 2011

[Set up name tags and markers, and pizza/snacks on a table by the door]

As Students enter the room:

Hi there, thanks for coming. Please help yourself to some food, and before you sit down, make yourself a name tag with just your first name on it. Once you've done that, feel free to grab a seat around the table, anywhere you'd like.

Facilitator Script:

Hello! Thanks so much for coming! My name is [Name], and this is my colleague [colleague name].
We work for Abt Associates, which is a research firm located in Cambridge. The Massachusetts
Department of Elementary and Secondary Education has hired our company to research the way
schools are using Expanded Learning Time, which means a longer school day and sometimes a longer
school year. We wanted to come talk to you to get your opinion and to hear what life is like for students
here at ().

Our conversation will last about half an hour, but if at any time you want to leave, please feel free to do so. If any part of the conversation makes you uncomfortable, we would very much appreciate you letting us know. You can do so either by telling either me or [colleague name] after the session ends, or by contacting one of the people listed at the bottom of the consent form.

Before we start our discussion, does anyone have any questions? If no one objects, we will be taping our conversation, only for the purposes of supplementing our own notes later. Is that alright with everyone?

Okav. let's begin.

Let's begin by going around the room and introducing ourselves. You may know each other, but you're all new to us and we're new to you. Just tell us your name, your homeroom teacher, and your favorite song.

Fantastic, it's great to meet all of you.

Let me tell you a little bit about how this is going to work. We're going to ask you some questions about school and about the amount of time you spend in school. Each time we ask a question, we'll give all of you a chance to first think quietly to yourselves, and then we ask that you raise your hand if you would like to share your thoughts.

- 1. I'd like you to think about the adults in this school with whom you feel most comfortable. Who do you feel most comfortable talking to? Please don't use any names, just tell us if they are a teacher, a counselor, the principal or some other adult.
 - Why do you feel you can talk to this _____
- 2. If your school day ended at 1:30 instead of 3:45, how would you spend the extra time? This isn't a question asking about your fantasy or dream afternoon of going to the chocolate factory or the Superbowl; try to be as realistic and specific as possible.
 - Where would you be?
 - Who would you be with?
- 3. I want you to think about times when you're most interested in what you're doing at school. Tell me about those times.
 - Times of day
 - Specific classes, activities or projects?
- 4. Now I'm going to ask you about the kind of help that's available in this school when you or your classmates are having a hard time understanding a concept in a lesson
 - a. I'd like you to think about a specific time when a teacher explained something to a someone in your class in a way that helped them to understand something that they didn't understand before.
 - Can you explain what your teacher did to help your classmate "get it?"
 - b. Now think about the last time you had a hard time understanding something your teacher was teaching you. Who did you ask for help?
 - Location (in or outside of the classroom)
 - Did you get the help that you need?
- 6. Think about all of the (Electives/Enrichment/Curriculum plus) classes you or your friends have taken. Why do you think your school has (Electives/Enrichment/Curriculum plus)?.
 - What do you learn from these classes?
 - Do you find them enjoyable and which ones do you like?